

**TWO NEW GENERA AND SOME RECORDS OF MIRIDAE  
(HEMIPTERA) FROM PANAMÁ**

J. MALDONADO CAPRILES

Department of Biology, University of Puerto Rico, Mayaguez,  
Puerto Rico 00708

ABSTRACT—*Englemania* new genus and *Myrmecomiris* new genus are described from Panamá. *Englemania bicolor* and *Myrmecomiris elistogaster* are described as new species. A list of 26 species of mirids occurring in Panamá is also given.

Among very interesting mirid material sent to me as a gift by Dr. D. Engleman, now living at Coco Solo, Canal Zone, there were specimens of what I am describing below as two new genera. Because there are few records of mirids from Panamá, besides what is recorded by Distant (1883) in *Biologia Centrali Americana*, I thought it convenient to include a list of some species collected by Dr. Engleman and by me.

The types of the new species are deposited in the collection of the United States National Museum (USNM) and paratypes in the collection of the Museum Nacional, Quinta da Boa Vista, Rio de Janeiro, Brazil (MN), and my collection (JMC).

In the descriptions that follow, 25 micrometer units are equivalent to 1 mm. This publication is possible thanks to NSF Grant GB-7382.

*Englemania* Maldonado, new genus

Bryocorinae, Bryocorini. Habitus as in fig. 1. Head horizontal (fig. 2), angularly produced between antennae, inserted to eyes; tylus arising close to level of apex of antennal sockets; vertex inconspicuously corrugate, convex; eyes moderately large, occupying sides of head, not quite reaching level of top and venter of head, separated from bucculae by distance equal to thickness of 1st antennal segment at apex. Beak straight, reaching base of genital capsule. Antennae inserted contiguous to and at midlength of height of eye (fig. 2). First antennal segment slightly shorter than interocular space, 2nd slightly over twice as long as 1st, 3rd as long as 1st, 4th slightly longer than 1st; 1st 2 much thicker than last 2, both slightly thickening toward apex; all segments thickly covered with abundant fine decumbent pubescence that is shorter than thickness of 1st 2 segments and longer than thickness of last 2.

Pronotum with moderately long collar, longer than thickness of 2nd antennal segment, densely pitted; calli well defined, moderately elevated, somewhat corrugate, well separated from each other in front; posterior lobe densely pitted; lateral margins of pronotum constricted; posterior margin straight above scutellum; without lateral carinae. Scutellum wider than long, disc depressed, margins slightly elevated. Forewing complete, smooth, opaque except membrane, embolium narrow and somewhat thickened, cuneus longer than wide, 2 cells in membrane. Legs slender, tapering to apex, 1st and 3rd thicker than 2nd; hind

femur with apex reaching beyond apex of abdomen, slightly curved; covered with abundant fine decumbent pubescence that is shorter than its corresponding segment of origin; tarsi thickened toward apex; arolia absent, pseudarolia arising from ventral surface. Body covered with abundant short fine decumbent pubescence. Genitalia as in fig. 3-6.

Type-species: *Englemania bicolor*, new species.

Because the rostrum reaches beyond the fourth abdominal segment *Englemania* runs to couplet 21 in Carvalho's (1955) key to the Bryocorini genera of the world. Carvalho's key (p. 31) can be modified to include the new genus as follows:

21. Collar strongly depressed, the apical corners of pronotum tuberculate (Venezuela) ..... *Pristoneura* Reuter  
 — Collar not depressed, the apical corners of pronotum not tuberculate .... 21a  
 21a. Head roundly produced forward and not reaching midlength of first antennal segment (Brazil) ..... *Stictolophus* Bergroth  
 — Head sharply produced forward and slightly surpassing apex of first antennal segment (Panamá) ..... *Englemania* new genus

The genus is dedicated to Dr. D. Engleman for his enthusiastic collecting and interest in the Hemiptera.

*Englemania bicolor* Maldonado, new species

Male: Habitus as in fig. 1. Head dorsally and laterally, 1st segment of beak and antenna, pronotum above, femora except basally, tibiae, basal  $\frac{1}{2}$  of clavus, outer longitudinal  $\frac{1}{2}$  of corium, embolium, and cuneus light orange brown. Second antennal segment, scutellum, apical  $\frac{2}{3}$  of clavus, inner longitudinal  $\frac{1}{2}$  of corium, and membrane dark brown. Head below, last 2 antennal segments, last 3 segments of beak, trochanters, base of femora, and 1st tarsal segments light stramineous. Metasternum orange. Abdomen mostly brownish, irregularly spotted with some lighter and some slightly darker areas.

Head: Length 8, width across eyes 10.5, interocular space 5. Antennal segments: 4.5 : 10 : 4.5 : 5.5, shape and pilosity as described for genus. Beak: 15 : 10 : 8 : 4, the fourth segment with the basal half overlapping the third, first reaching posterior margins of anterior coxae. Pronotum: pilosity, collar, calli, anterior and posterior lobes, and lateral and posterior margins as described for genus; length 9.5, anterior width 7, posterior width 15.5. Scutellum: width 8, length 6. Length to apex of forewing 2.0-2.1, width across forewing 0.73 mm. Genitalia as in figures 3-6.

Female unknown.

Holotype: ♂, Coco Solo Hospital, 9°21'N-79°51'W, Canal Zone, Panamá, in light trap, 14 September 1972, D. Engleman collector, USNM, Cat. No. 73272. Paratypes: 3 ♂♂, same place of collection, each on different dates, 1 in MN, 2 in JMC.

*Myrmecomiris* Maldonado, new genus

Mirinae, Herdoniini. Habitus as in fig. 7, ant-mimic. Head vertical, long (fig. 8-9); in dorsal aspect very slightly produced between antennae, inserted to eyes,

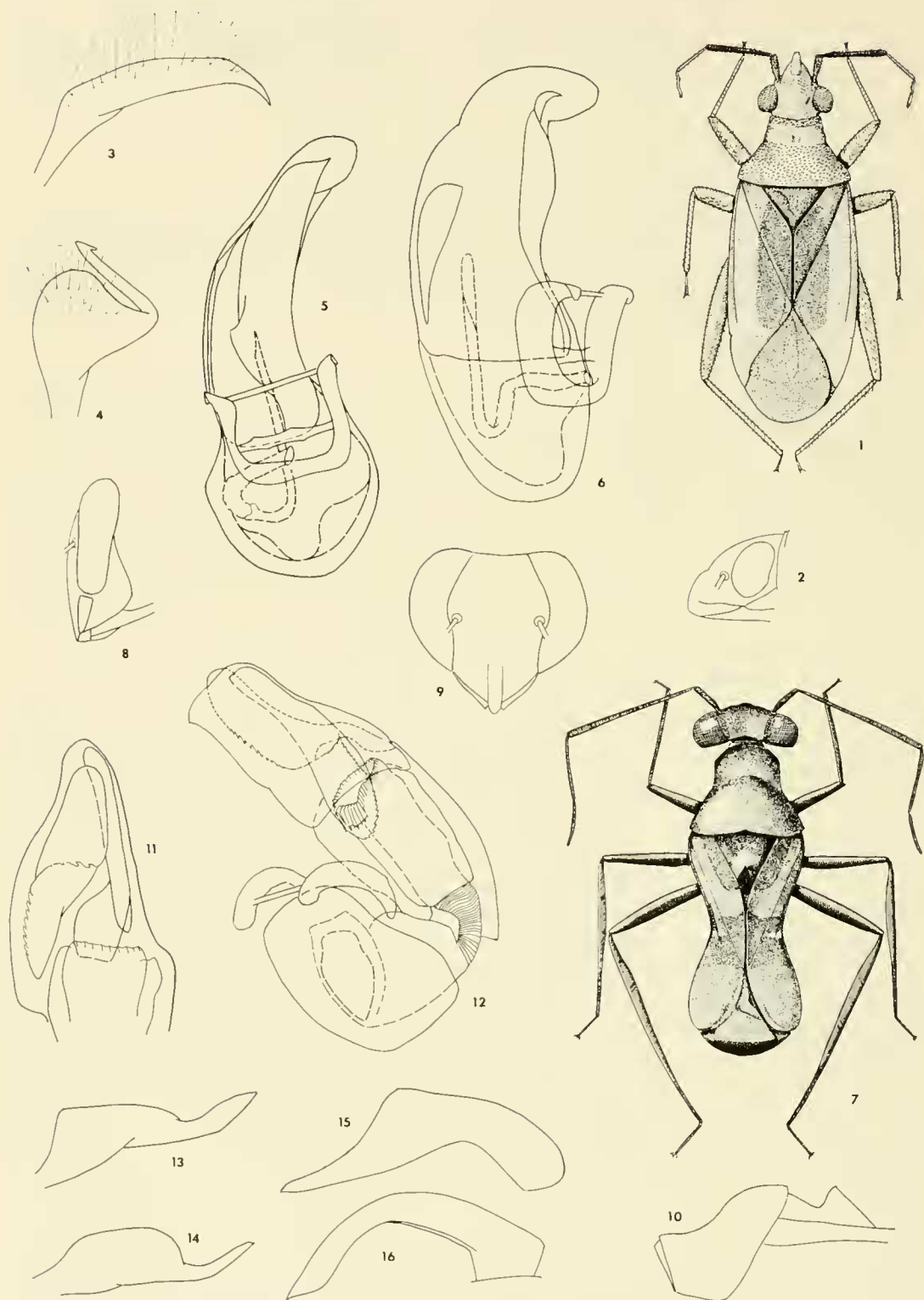


Fig. 1-6. *Englemania bicolor*, male. 1, habitus. 2, head, lateral. 3, left clasper, dorsal. 4, right clasper, ventral. 5, aedeagus, dorsal. 6, aedeagus, lateral. Fig. 7-16. *Myrmecomiris clistogaster*, male. 7, habitus. 8, head, lateral. 9, head, frontal. 10, pronotum and scutellum, lateral. 11, tip of aedeagus, ventral. 12, aedeagus, latero-dorsal. 13, right clasper, lateral. 14, right clasper, dorsal. 15, left clasper, lateral. 16, left clasper, dorsal.

very broad, almost as wide as widest part of pronotum; eyes large, from above slightly produced backward and reaching slightly beyond collar, in lateral aspect slightly over  $\frac{2}{3}$  as long as head; antennae inserted close to eyes, at about mid-length of eye in shallow concavity of inner margin; vertex smooth, slightly sunken along median line. Vertex and frons smooth, with moderately long vertical hairs. Antennae with 1st 2 segments thicker than last 2; 2nd slightly incrassate,  $4\times$  as long as 1st; 3rd  $2\times$  as long as 4th and slightly over  $\frac{1}{2}$  as long as 2nd, covered with inconspicuous very short pilosity. Beak straight, almost reaching anterior margin of middle coxae. Pronotum smooth, strongly constricted before middle; collar sunken, well defined, short, slightly shorter than thickness of 1st segment; anterior lobe flat above (fig. 10), anterior margin slightly convex; posterior lobe globose, widening to lateral angles, posterior margin slightly bisinuate; anterior lobe and contiguous areas of posterior lobe with long silvery decumbent pubescence pointing cephalad, remaining part of hind lobe with scattered shorter vertical pilosity. Scutellum with erect, broad, conical projection (fig. 10); with scattered long vertical pilosity. Forewing strongly constricted at about midlength, area near constriction velvety, basad and caudad of this area somewhat polished, inner longitudinal  $\frac{1}{2}$  of clavus velvety; membrane from level of cuneus bent at  $90^\circ$ ; cuneus  $2\times$  as long as wide at base, basally cleft from clavus. Coxae of forelegs well separated from last 2 pairs, which are contiguous; forefemora thickest at midlength, mid- and hind femora widest basally; foretibiae straight, of same thickness throughout; fore and hind tibiae flattened on basal half; legs with sparse, long, vertical, grayish pilosity; arolia divergent, 1st segment of hind tarsi shorter than 2nd and 3rd together. Abdomen strongly constricted and flattened at base; apical portion broad, thick, and bent downward so that last terga are vertical. Genitalia as in fig. 11-16.

Female unknown.

Type-species: *Myrmecomiris clistogaster*, new species.

The erect conical projection on disc of scutellum and the strongly constricted pronotum, place *Myrmecomiris* close to *Zacynthus* Distant in Carvalho's (1955) key to the genera of Herdoniini (p. 109). They differ as follows: *Zacynthus*—head subtriangular and subobliquely deflected, vertex longitudinally sulcate, first antennal segment shorter than length of head, anterior margin of pronotum subtruncate or slightly emarginate, spine of scutellum slender and with a distinct central carination to apex; *Myrmecomiris*—head very broad and vertical, vertex not sulcate, first antennal segment longer than length of head, anterior margin of pronotum slightly convex, spine of scutellum conical and without carination at apex. The very broad head and the conical spine on disc of scutellum separate *Myrmecomiris* from other Herdoniini. The generic name refers to the ant-like shape of the body.

*Myrmecomiris clistogaster* Maldonado, new species

Male: Mostly black, slightly polished; short white transverse fascia on corium; mid- and hind coxae whitish below. Tibiae dark gray on apical half. *Head*: Width across eyes 34, interocular space 8, length 8, length of face 29. *Antenna*: 10 : 41 : 24 : 17. *Pronotum*: Length 28, anterior width 17, posterior width 34.

Width at constriction of forewings 23. *Scutellum*: Length 18, width at base 20. Length to apex of corium 4.0 mm., width across humeral angles of pronotum 1.4 mm.

Genitalia as described for genus.

Holotype: ♂, Coco Solo Hospital, Canal Zone, Panamá, in light trap, 9°21'N–79°51'W, 13 September 1972, D. Engleman collector, USNM, Cat. No. 73273. Paratypes: 3 ♂♂, same place of collection, each on a different date, 1 in MN, 3 in JMC.

The trivial name of the species refers to the narrow waistlike abdomen.

#### Records of Miridae from Panamá

In the following records, if no collector is given the specimens were collected by Dr. D. Engleman. The specimens are deposited in my collection.

#### BRYOCORINAE: Bryocorini

*Bothrophorella nigra* (Stal)—Porto Bello, JMC.

*Eccritotarsus embolionigrus* Carv.—Cerro Campana, 850 m., Stockwell coll.

*Neella carvalhoi* Hsiao—Gatun Spillway, Coco Solo Hospital.

*Neella floridula* (Distant)—Cerro Campana

*Neofurius bimaculatus* Carv. & Hsiao—Coco Solo Hospital

*Pachymerocerista pilosus* (Carv.)—Coco Solo Hospital

*Panamacoris stramineus* Carv. & Penha—Coco Solo Hospital

*Parafurius discifer* (Stal)—Madden Dam, C. Z., Punta Vacamonte 8°52'N, 79°40'W

*Pycnoderes atratus* (Distant)—Coco Solo Hospital

*Pycnoderes quadrimaculatus* G.-M.—Boquete, Prov. Chiriquí; Panamá City, Porto Bello, JMC.

#### DERAEOCORINAE: Hyaliadini

*Annona bimaculata* (Distant)—Boquete, Prov. Chiriquí

*Florus insolitus* Distant—Coco Solo Hospital

#### MIRINAE

##### Mirini

*Euchilocoris scutellatus* (Distant)—Coco Solo Hospital, C. Z.

*Horcias variegata* Distant—Coco Solo Hospital

*Lampetusa anatina* Distant—Coco Solo Hospital; Madden Reservoir.

*Mabelia pulcherrima* Kirkaldy—Coco Solo Hospital.

*Piasus* n. sp., apparently the second species in the genus as the specimens at hand do not agree with Carvalho's (1946) description of *P. cribricollis* (Stal); Coco Solo Hospital.

*Prepops frontalis* Reuter—Coco Solo Hospital.

*Proba sallei* (Stal)—Boquete, Prov. Chiriquí.

*Taedia signata* Carv. & Gomez—Coco Solo Hospital.

*Taylorilygus pallidulus* (Blanch.)—Coco Solo Hospital; Boquete, Prov. Chiriquí.

## Stenodemini

*Collaria oleosa* (Distant)—Darién; Boquete, Coco Solo Hospital; Panamá City, Porto Bello, JMC.

## Herdoniini

*Paraxenetus gibbus* (Distant), Coco Solo Hospital.

*Paraxenetus bracteatus* (Distant), Coco Solo Hospital.

## PHYLINAE

## Phylini

*Campylomma cardini* Barber & Brunner—Coco Solo Hospital.

## Dicyphini

*Macrolophus cuiabanus* Carv.—Fort Amador, Ch. Keenan coll.

## REFERENCES

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- Distant, W. L. 1883. Hemiptera-Heteroptera. Biologia Centrali-Americana. 1:234-303, 415-451, 462.

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**BOOK REVIEW**

FACTORS AFFECTING DISPERSAL DISTANCES OF SMALL ORGANISMS. D. O. Wolfenbarger. 1975. Exposition Press, Hicksville, New York, 230 pp. Hardbound. \$15.00.

Entomologists interested in the phenomenon of dispersal will find this well-written book a useful reference. It is a welcome addition to entomological literature because it covers an area not otherwise treated in detail and should provide impetus for studies primarily directed toward dispersal per se. Insect examples are in the majority, but this undoubtedly stems from the fact that most research on the subject of dispersal has employed insects as subjects. However, Wolfenbarger has done an admirable job in trying to maintain a balanced perspective by presenting data on spores, pollen, mites, nematodes and bacteria.

The basic format treats inorganic and organic factors which influence dispersal, and each topic is treated systematically.

The primary shortcoming of this book is that of the 400 plus references cited, over 85% are more than 15 years old. A second weakness of the book, recognized by the author, is that virtually all of the references are English-language papers.

The cost of the book is somewhat high, but this seems to be a general trend of the present.

GORDON GORDH, *Systematic Entomology Laboratory, IBIII, USDA, c/o U.S. National Museum, Washington, D.C. 20560.*